VIROLOGY

Volume 241, 1998

Academic Press

Copyright © 1998 by Academic Press

All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the Publisher. *Exceptions:* It is the policy of Academic Press that authors need not obtain permission in the following cases only: (1) to use their original figures or tables in their future works; (2) to make copies of their papers for use in their classroom teaching; and (3) to include their papers as part of their dissertations.

The appearance of the code at the bottom of the first page of an article in this journal indicates the Publisher 's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (222 Rosewood Drive, Danvers, Massachusetts 01923), for copying beyond that permitted by Sections 107 or 108 of the U. S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1998 articles are as shown on the article title pages; if no fee code appears on the title page, the copy fee is the same as for current articles.

0042-6822/98 $25.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.

Contents of Volume 241

Number 1, February 1, 1998

Virus Replication/Gene Expression

Comparison of the Lysogeny Modules from the Temperate *Streptococcus thermophilus* Bacteriophages TP-J34 and Sfi21: Implications for the Modular Theory of Phage Evolution — Horst Neve, Kirsten I. Zenz, Frank Desiere, Andreas Koch, Knut J. Heller, and Harald Brüssow 61

Regulation of the Bacteriophage Mu *gem* Operon — G. Fabozzi, L. Paolozzi, and P. Ghelardini 73

Effects of Mutations in the C-terminal Region of NIa Protease on *cis*-Cleavage between NIa and NIb — Do-Hyung Kim, Ji Seon Han, Jisun Lew, Sung Soo Kim, Byoung Heon Kang, Duk Chul Hwang, Do Soo Jang, Woong Kim, Byeung Doo Song, and Kwan Yong Choi 94

Genetic Complementation among Three Panels of Mouse Hepatitis Virus Gene 1 Mutants — Robin P. Stalcup, Ralph S. Baric, and Julian L. Leibowitz 112

Interaction between the Herpes Simplex Virus Type 1 Origin-Binding and DNA Polymerase Accessory Proteins — Steven J. Monahan, Lynn A. Grinstead, Wilma Olivieri, and Deborah S. Parris 122

Differential Stability of Baculovirus Late Transcription Complexes during Initiation and Elongation — C. J. Funk, S. H. Harwood, and G. F. Rohrmann ... 131

Nucleotide Sequence and Infectivity of a Full-Length cDNA Clone of Panicum Mosaic Virus — Massimo Turina, Miko Maruoka, Judit Monis, A. O. Jackson, and Karen-Beth G. Scholthof 141

Virus–Cell Biology

One Amino Acid Change on the Capsid Surface of Poliovirus Sabin 1 Allows the Establishment of Persistent Infections in HEp-2c Cell Cultures — Isabelle Pelletier, Gillian Duncan, and Florence Colbère-Garapin 1

Two Amino Acid Substitutions in the Type 3 Poliovirus Capsid Contribute to the Establishment of Persistent Infection in HEp-2c Cells by Modifying Virus–Receptor Interactions — Gillian Duncan, Isabelle Pelletier, and Florence Colbère-Garapin 14

U_L13 Protein Kinase of Herpes Simplex Virus 1 Complexes with Glycoprotein E and Mediates the Phosphorylation of the Viral Fc Receptor: Glycoproteins E and I — Teresa I. Ng, William O. Ogle, and Bernard Roizman 37

The Intracellular Expression Pattern of the Human Papillomavirus Type 11 E1^E4 Protein Correlates with Its Ability to Self Associate — Janine T. Bryan, Kenneth H. Fife, and Darron R. Brown 49

Mutation of Polyadenylation Signals Generates Murine Retroviruses That Produce Fused Virus–Cell RNA Transcripts at High Frequency — Qing Yun Zhang, Peter A. Clausen, Bogdon A. Yatsula, Georges Calothy, and Donald G. Blair .. 80

Studies of the Binding Properties of Influenza Hemagglutinin Receptor-Site Mutants — Javier Martín, Stephen A. Wharton, Yi Pu Lin, Darin K. Takemoto, John J. Skehel, Don C. Wiley, and David A. Steinhauer 101

Interferon Treatment Inhibits the Replication of Simian Immunodeficiency Virus at an Early Stage: Evidence for a Block between Attachment and Reverse Transcription — Matthew D. Taylor, Marcus J. Korth, and Michael G. Katze 156

Viral Pathogenesis and Immunity

Attenuation of Japanese Encephalitis Virus by Selection of Its Mouse Brain Membrane Receptor Preparation Escape Variants — Haolin Ni and Alan D. T. Barrett 30

Effect of Changes in the Glycosylation of the Human Immunodeficiency Virus Type 1 Envelope on the Immunoreactivity and Sensitivity to Thrombin of Its Third Variable Domain — Marie-Jeanne Papandreou and Emmanuel Fenouillet 163

Author Index for Volume 241, Number 1 168

Number 2, February 15, 1998

Virus Replication/Gene Expression

Temporal Expression of the AcMNPV *lef-4* Gene and Subcellular Localization of the Protein — David Durantel, Guy Croizier, Marc Ravallec, and Miguel López-Ferber 276

Identification of Single Amino Acids in the Human Papillomavirus 11 E2 Protein Critical for the Transactivation or Replication Functions — Christopher S. Cooper, Sara N. Upmeyer, and Patricia L. Winokur 312

Evolution of *Streptococcus thermophilus* Bacteriophage Genomes by Modular Exchanges Followed by Point Mutations and Small Deletions and Insertions — Frank Desiere, Sacha Lucchini, and Harald Brüssow 345

Virus–Cell Biology

Conservation of the Architecture of the Golgi Apparatus Related to Differential Organization of Microtubules in Polykaryocytes Induced by *syn*$^-$ Mutants of Herpes Simplex Virus 1 — Patricia L. Ward, Elisa Avitabile, Gabriella Campadelli-Fiume, and Bernard Roizman 189

Infectivity Enhancement by HIV-1 Nef Is Dependent on the Pathway of Virus Entry: Implications for HIV-Based Gene Transfer Systems — Tianci Luo, Janet L. Douglas, Robyn L. Livingston, and J. Victor Garcia 224

Chimeras Containing Influenza NS1 and HIV-1 Rev Protein Sequences: Mechanism of Their Inhibition of Nuclear Export of Rev Protein–RNA Complexes — Zhongying Chen, Yongzhong Li, and Robert M. Krug 234

Evidence for a Continued Requirement for CD40/CD40 Ligand (CD154) Interactions in the Progression of LP-BM5 Retrovirus-Induced Murine AIDS — Kathy A. Green, Randolph J. Noelle, and William R. Green 260

Human T-Cell Leukemia Virus Type 1 Tax Protein Induces the Expression of Lymphocyte Chemoattractant SDF-1/PBSF — Masaaki Arai, Takashi Ohashi, Tomonori Tsukahara, Tsutomu Murakami, Toshiyuki Hori, Takashi Uchiyama, Naoki Yamamoto, Mari Kannagi, and Masahiro Fujii 298

Viral Pathogenesis and Immunity

Apoptotic Killing of CD4$^+$ T Lymphocytes in HIV-1-Infected PHA-Stimulated PBL Cultures Is Mediated by CD8$^+$ LAK Cells — Liqiang Wang, Gary R. Klimpel, Josè M. Planas, Hongbo Li, and Miles W. Cloyd 169

Differences in Chemokine Coreceptor Usage between Genetic Subtypes of HIV-1 — Charlotte Tscherning, Annette Alaeus, Robert Fredriksson, Åsa Björndal, HongKui Deng, Dan R. Littman, Eva Maria Fenyö, and Jan Albert 181

Persistent HTLV-I Infection of Breast Luminal Epithelial Cells: A Role in HTLV Transmission? — Šárka O. Southern and Peter J. Southern 200

The Genomic Sequence of Defective Interfering Semliki Forest Virus (SFV) Determines Its Ability to Be Replicated in Mouse Brain and to Protect against a Lethal SFV Infection *in Vivo* — Michael Thomson, Christine L. White, and Nigel J. Dimmock 215

Evolution of Human Immunodeficiency Virus Type 1 Envelope Sequences in Infected Individuals with Differing Disease Progression Profiles — Raj Shankarappa, Phalguni Gupta, Gerald H. Learn, Jr., Allen G. Rodrigo, Charles R. Rinaldo, Jr., Michael C. Gorry, James I. Mullins, Peter L. Nara, and Garth D. Ehrlich . . . 251

Characterization of the Cytotoxic Factor(s) Released from Thymic Dendritic Cells upon Human Immunodeficiency Virus Type 1 Infection — Sylvie Beaulieu, Marielle Lafontaine, Martin Richer, Isabelle Courchesne, Eric A. Cohen, and Dominique Bergeron 285

A Single Conserved Amino Acid in the Coat Protein Gene of Pea Seed-Borne Mosaic Potyvirus Modulates the Ability of the Virus to Move Systemically in *Chenopodium quinoa* — Karina Andersen and I. Elisabeth Johansen 304

Murine Cytomegalovirus Infection Inhibits IFNγ-Induced MHC Class II Expression on Macrophages: The Role of Type I Interferon — Mark T. Heise, Jessica L. Pollock, Andrew O'Guin, Melissa L. Barkon, Shannon Bromley, and Herbert W. Virgin IV 331

Emerging Viruses/Unconventional Agents

Self-Cleaving Circular RNA Associated with Rice Yellow Mottle Virus Is the Smallest Viroid-like RNA — R. F. Collins, D. L. Gellatly, O. P. Sehgal, and M. G. Abouhaidar 269

Hantavirus Pulmonary Syndrome Outbreak in Argentina: Molecular Evidence for Person-to-Person Transmission of Andes Virus — P. J. Padula, A. Edelstein, S. D. L. Miguel, N. M. López, C. M. Rossi, and R. D. Rabinovich 323

Author Index for Volume 241 357